## **CLAIMS**

- 1. A new fibrinogen binding protein derived from Staphylococci having a molecular-weight of 60 kDa.
- 2. Hybrid-DNA-molecule comprising a nucleotide sequence from S. aureus coding for a protein or polypeptide having fibrinogen binding activity.
- 3. Plasmid or phage comprising a nucleotide sequence from *S. aureus* coding for a protein or polypeptide having fibrinogen binding activity.
  - 4. An *E. coli* strain expressing said fibrinogen/binding protein.
  - 5. A microorganism transformed by recombinant DNA molecule of claim
- **15 2**.

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- 6. Hybrid-DNA-molecule according to claim 2, comprising the following nucleotide sequence:
  GAGCGAAGGA TACGGTCCAA GAGAAAGAA ACCAGTGAGT ATTAATCACA
- 20 ATATCGTAGA GTACAATGAT GGTACTTTTA AATATCACA
  TTTAACTCAA CACCTAAATA TATTAAATTC AAACATGACT ATAATATTTT
  AGAATTTAAC GATGGTACAT TCGAATATGG TGCACGTCCA CAATTTAATA
  AACCAGCAGC GAAAACTGAT GCAACTATTA AAAAAGAACA AAAATTGATT
  CAAGCTCAAA ATCTTGTGAG AGAATTTGAA AAAACACATA CTGTCAGTGC
  25 ACACAGAAAA GCACAAAAGG CAGTCAACTT AGTTTCGTTT GAATACAAAG
  TGAACAAAAT GGTCTTACAA GAGCGAATTG ATAATGTATT AAAACAAGGA
  - TTAGTGAGA
- 7. A method for producing a fibrinogen binding protein or polypeptide wherein a) at least one hybrid-DNA molecule according to claim 2, is introduced into a microorganism, b) said microorganism is cultivated in a growth promoting medium, and c) the protein thus formed is isolated.
- 35 8. A fibrinogen binding protein or polypeptide comprising at least one amino acid sequence

SEGYGPREKK PVSINHNIVE YNDGTFKYQS RPKFNSTPKY IKFKHDYNIL EFNDGTFEYG ARPQFNKPAA KTDATIKKEQ KLIQAQNLVR EFEKTHTVSA HRKAQKAVNL VSFEYKVKKM VLQERIDNVL KQGLVR 20 M

- 9. Pharmaceutical composition for the inhibition of Staphylococci binding to fibrinogen comprising a fibrinogen binding protein of claim 1 in combination with a pharmaceutically acceptable carrier.
- 5 10. Method for inhibition of Staphylococci binding to fibrinogen in mammals including humans, by administering a therapeutically and/or prophylactically effective amount of a fibrinogen binding protein of claim 1 to a mammal in need of such treatment.
- 10 11. Method for passive immunization against Staphylococcal infection, comprising administering to a mammal antibodies against a fibrinogen binding protein of claim 1 in an amount sufficient to provide passive immunization.

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